



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

WANG *et al.*

Appl. No.: 09/762,631

Filed: April 16, 2001

For: **Embedded Quadtree Wavelets in
Image Compression**

Confirmation No.: 6576

Art Unit: 2625

Examiner: Johnson, Timothy M.

Atty. Docket: 1556.0270000

Information Disclosure Statement

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☐ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA), OR within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, OR before the mailing date of a first Office Action on the merits OR before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.
- ☒ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.

- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☒ c. Attached is our PTO-2038 Credit Card Payment Form in the amount of **\$180.00** in payment of the fee under 37 C.F.R. § 1.17(p).
- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$_____ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign

application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.

- ☐ 6. A concise explanation of the relevance of the non-English language document(s) appears below:

- ☒ 7. Copies of the documents are submitted herewith.

- ☐ 8. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. _____, filed _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

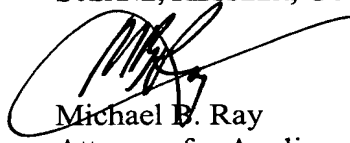
- ☐ 9. No copies of U.S. patents and patent application publications cited on the attached Form PTO-1449 are submitted in accordance with 1276 OG 55 because this application was filed after June 30, 2003.
- ☐ 10. It is expected that the examiner will review the prosecution and cited art in the parent application no(s). _____ in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution history has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

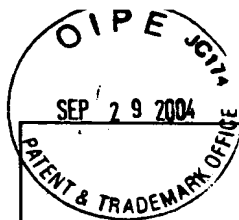
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.


Michael B. Ray
Attorney for Applicants
Registration No. 33,997

Date: 9/29/04

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FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
1556.0270000APPLICATION NO.
09/762,631APPLICANT
WANG et al.FILING DATE
April 16, 2001GROUP
2625

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	5,412,741	05/1995	Shapiro			
	AB1	5,748,903	05/1998	Agarwal			
	AC1						
	AD1						
	AE1						
	AF1						
	AG1						
	AH1						
	AI1						
	AJ1						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AK1	1 269 444	05/1990	CA			N/A
	AL1	2,268,191	04/1998	CA			N/A
	AM1	0 466 475 A2	01/1992	EP			N/A
	AN1	WO 97/38533 A1	10/1997	WO			N/A
	AO1	WO 98/19273 A1	05/1998	WO			N/A

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AP	<u>1</u>	Egger, O. et al., "Arbitrarily-Shaped Wavelet Packets For Zerotree Coding," <i>International Conference on Acoustics, Speech and Signal Processing - Proceedings Conference 21</i> , IEEE, pp. 2335-2338 (1996).
AQ	<u>1</u>	Frajka, T. et al., "Progressive Image Coding with Spatially Variable Resolution," <i>Proceedings of the International Conference on Image Processing</i> , Los Alamitos, CA, IEEE, pp. 53-56 (1997).
AR	<u>1</u>	Kossentini, F. et al., <i>Questionnaire: Embedded Quadtree Predictive Coder (EQPC)</i> , ISO/IEC/JTC1/SC29/WG1/N666, Posted on or about November 1997, at http://www.itscj.ipsj.or.jp/sc29/open/29view/29n25391.pdf , 22 pages.
AS	<u>1</u>	Said, A. et al., "A New, Fast, and Efficient Image Codec Based on Set Partitioning in Hierarchical Trees," <i>IEEE Transactions on Circuits and System for Video Technology</i> , IEEE, Vol. 6, No. 3, pp. 243-250 (June 1996).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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	AA2						
	AB2						
	AC2						
	AD2						
	AE2						
	AF2						
	AG2						
	AH2						
	AI2						
	AJ2						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AK2	WO 00/04721 A1	01/2000	WO			N/A
	AL2						N/A
	AM2						N/A
	AN2						N/A
	AO2						N/A

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AP	<u>2</u>	Taubman, D., "High Performance Scalable Image Compression with EBCOT," <i>Proceedings of the 6th International Conference on Image Processing</i> , Kobe, Japan, Vol. 3, pp. 344-348 (1999).
AQ	<u>2</u>	Taubman, D. et al., EBCOT: Embedded Block coding with optimized truncation, ISO/IEC/JTC1/SC29/WG1/N1020R, October 1998, at http://citeseer.nj.nec.com/context/1128550/0 , pages 1-89 (JPEG2000 Verification Model VM3A).
AR	<u>2</u>	<i>Terminal Equipment and Protocols for Telematic Services: Information Technology-Digital Compression and Coding of Continuous-Tone Still Images</i> , Recommendation T.81, CCITT, The International Telegraph and Telephone Consultative Committee, 57 pages (September 1992).
AS	<u>2</u>	U.S. Utility Patent Application Serial No. 09/743,839, entitled "Region-Based Scalable Image Coding," 32 pages.

EXAMINER

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	AK3						N/A
	AL3						N/A
	AM3						N/A
	AN3						N/A
	AO3						N/A

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AP	<u>3</u>	U.S. Utility Patent Application Serial No. 09/913,485, entitled "Method And System Of Region-Based Image Coding With Dynamic Streaming Of Code Blocks," 111 pages.
AQ	<u>3</u>	
AR	<u>3</u>	
AS	<u>3</u>	

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